SANTA CRUZ BIOTECHNOLOGY, INC.

TRIM59 siRNA (h): sc-78105

BACKGROUND

The tripartite motif (TRIM) family of proteins are characterized by a conserved TRIM domain that includes a coiled-coil region, a B-box type zinc finger, one RING finger and three zinc-binding domains. TRIM59 (tripartite motif-containing 59), also known as MRF1 (modulator recognition factor 1), TSBF1 or RNF104, is a 403 amino acid single-pass membrane protein that contains one RING-type zinc finger and one B box-type zinc finger. One of several members of the TRIM family, TRIM59 is thought to repress ERα-mediated transcriptional activation and may play a role in the regulation of ER-dependent gene expression and the pathogenesis of breast cancer. The gene encoding TRIM59 maps to human chromosome 3, which houses over 1,100 genes, including a chemo-kine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

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3. Georgescu, S.P., Li, J.H., Lu, Q., Karas, R.H., Brown, M. and Mendelsohn, M.E. 2005. Modulator recognition factor 1, an AT-rich interaction domain family member, is a novel corepressor for estrogen receptor α. Mol. Endocrinol. 19: 2491-2501.
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5. Girault, I., Bièche, I. and Lidereau, R. 2006. Role of estrogen receptor α transcriptional coregulators in tamoxifen resistance in breast cancer. Maturitas 54: 342-351.
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CHROMOSOMAL LOCATION

Genetic locus: TRIM59 (human) mapping to 3q26.1.

PRODUCT

TRIM59 siRNA (h) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TRIM59 shRNA Plasmid (h): sc-78105-SH and TRIM59 shRNA (h) Lentiviral Particles: sc-78105-V as alternate gene silencing products.

For independent verification of TRIM59 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3 nmol of lyophilized siRNA. These include: sc-78105A, sc-78105B and sc-78105C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

TRIM59 siRNA (h) is recommended for the inhibition of TRIM59 expression in human cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor TRIM59 gene expression knockdown using RT-PCR Primer: TRIM59 (h)-PR: sc-78105-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.